NOTES OF A SHORT ADDRESS TO THE CANDIDATES AT THE OPENING OF THE ARMY MEDICAL SCHOOL AT NETLEY,

APRIL 1ST, 1875.

By I. FAYRER, M.D., C.S.I., President of the Indian Medical Board; Member of the Senate.

GENTLEMEN,-By permission of Dr. Fraser and the Senate, I propose to make a few remarks on this occasion of the commencement of another session of the Army Medical School. My reason for doing so is, that I think a few words from one who has been long engaged in the work you are commencing may not be out of place. They will be the result of some experience, and you may accept them as a token of

the result of some experience, and you may accept the interest I take in your future career.

No position in which I have been placed has afforded me more satisfaction than that I now occupy as a member of the Senate of this School; for it places me in relation with the rising generation of medical officers, and enables me to feel that I may still in some degree further that which has always deeply interested me—medical education.

It is more than a quarter of a century, though it seems but as yesterday, since I was, as you now are, commencing my career as a medical officer; but how great are your advantages, compared with those of the date to which I look back! How much has been done to promote your interests and improve the means of fitting you for your work! Since the Crimean war, great changes have taken place in the constitution of the medical services, and in the duties and responsibilities of the medical officers. The sciences of military hygiene and medicine have made rapid progress. The medical officer is no longer regarded merely as the physician or surgeon to treat disease or wound; he is the guardian of the health of armies and fleets. In some cases, and especially in India, he holds the same position in regard to the civil population. It is a fact, that officers in the Indian Medical Service, as sanitary commissioners, are the guardians of the health of two hundred millions of people.

Your duties will be of a varied character, and you must be well prepared to discharge them efficiently. Prevention of disease and preservation of health are very essential; but they must not occupy your attention to the exclusion of the study of disease itself, which you must attention to the exclusion of the study of disease itself, which you must be prepared to treat in every form, and as it occurs in epidemic and endemic visitations. You must be general practitioners in the videst sense of the term, equally prepared to perform a surgical operation, treat disease, lay down the sanitary conditions for the proper construction of a barrack or hospital, analyse a doubtful potable water, detect an obscure poison, or deal with an impending or present visitation of cholera or other epidemic disease. Where you are going, there will be no room for specialisation. Admirable as the specialist may be in great cities, he would be of little use in a field-hospital or ironclad during an action, or in a cholera or fever camp in India or the tropics.

In some services, the medical officers have substantive military rank. The Medical Director-General of the United States army is a general.

The Medical Director-General of the United States army is a general. The reports of his department contain papers by majors and captains, who are the surgeons and assistant-surgeons of regiments. the case with us; and you must bear in mind that, though your position is as good as that of other officers, your relative rank gives you no title to assume the duties or offices of the combatant branch. I need hardly hint at the bad taste of assuming anything to which you are not entitled, especially that to which your own position as members of a learned profession should make you indifferent. But still you are soldiers; and it may happen, as it has done before, to devolve on you, in emergencies, to act as such. You have many brilliant examples of the medical taking the place of the combatant officer. Should it fall to your lot, be ready to show that you are as ready for this as for any other duty.

Let me advise you not to forget that you are medical at the same

time as you are military men. Let there be a due combination of each element. Keep to your own distinct sphere of duty, and you will exercise great influence for good. Overstep it, and you will not only



be in a false position, but your efforts for good will be negatived, and your counsels useless. So much of the influence for good in the position of the medical officer depends on his personal character, that you should endeavour to let the standard of that be pitched as high as possible.

Whatever may be said or thought of the position of the medical officers collectively, no one can deny that individually they always receive the consideration and respect that individually individually the standard of the consideration and respect that in due to their consideration and respect that in due to their considerations.

receive the consideration and respect that is due to their own individual and personal merits. You have abundant examples—living, I am glad to say-to imitate; and I might remind you of one recently removed from among us ripe in age and distinction, who always and to the last took deep interest in this school and in his younger brethren, who

has left us the history of a life and character, which all young naval and military surgeons may study with advantage.

Having completed your work at Netley, you will be ready to enter on your duties, and you will probably think that you are entitled to rest after your labours, and have leisure to digest and assimilate all that you have taken in here. But short interval will intervene before you are in harness, and begin the business of life in earnest. You will realise the value of the training you have received. You must act for yourselves, add to your stock of knowledge and that which may be of use to your successors in this school, when, perchance, one of you

or use to your successors in this school, when, perchance, one of you may occupy one of its professorial chairs, or endeavour, as I do, to encourage your younger brethren in starting on their journey in life. The field before you is large. Far from being exhausted, it is in many places hardly touched. Great problems of hygiene and medicine still await solution. Large questions concerning disease; the laws regulating the rise and spread of cholera and other epidemics, their pathology, etiology, and therapeutics; the nature and action of that which in our ignorance we call malaria; the subject of fever in all forms; and many kindred subjects—will engage work attention, and give you ample kindred subjects—will engage your attention, and give you ample ground for exploration and discovery. Or, apart from medicine and hygiene, we may turn to the whole range of natural science. The zoology, botany, geology, mineralogy, meteorology, climatology, ethnology, of many countries, and especially of India, offer rich mines, in which are veins of wealth yet unexplored and unrevealed.

You must feel a longing to enter on a career that offers so many paths to instruction. Think, too, of the examples in whose footsteps you may follow, and of what has been done by such men—all military or naval surgeons—as Guthrie, Ballingall, Richardson, Falconer, Annesley, Twining, Thompson, Martin, Hooker, Huxley, Flower, Parkes, Maclean, Longmore, Goodeve, Chevers, Murchison, and many more; and shall they not be followed by some whose names will be written in the annals of this school? I must not dwell longer, much as I should like to do so, on this subject, for I have a few words to say about the services you are to join, and especially of the Indian; for though I have served in them all, I am best qualified to speak of that in which the greater part of my life has been passed.

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The covenanted Indian medical service comprised, on January 1st, 1875, 675 members of all ranks; of these, 3 were surgeons-general, 22 departs surgeons-general, 257 surgeons-major, and 293 surgeons. The deputy surgeons-general, 357 surgeons-major, and 293 surgeons. designation of assistant-surgeon, as you are aware, has been discontinued. This was a title in no case, perhaps, very appropriate, but least of all so in India, where most commissioned medical officers held independent charges from the beginning. There are three divisions, those of Bengal, Madras, and Bombay, each with its own list, and not concerned with the others. To one or other of these, according to circumstances, already doubtless known to you, those destined for India will belong; and to any of the varied appointments offered by them each of you may aspire. I wish, however, to remind you, that the Indian medical service is not purely military, but general, and that it is not the public medical service only, but the medical profession in India; for on you will devolve all important professional duties, including medical education, in the country.

Two years must be passed in military duty before you can obtain promotion; but, after that is completed, the work is often of a different character, and quite distinct from the army. There is also another condition, that, before you can permanently hold any appointment, civil or military, you must pass an examination in the language of the Presidency to which



you belong. This used formerly to be merely colloquial; it now includes both reading and writing the language in the native character, and I strongly recommend you to set yourselves to do this immediately after reaching India. It is important that you should commence it early, for if put off it becomes irksome, as increasing work leaves you less time and inclination to devote to it. Though the lower standard, as it is called, is all that is absolutely required, you will do well to aim at the higher; and there are others still more advanced, for which a successful examination is rewarded by a considerable sum of moneysufficient, at least, to defray the expenses of tuition. The value of a sound knowledge of the language is great; it is seldom acquired if not begun early; it is essential in your communication with the natives, and is a condition of holding many appointments. No one, I am sure, has ever had cause, even when it was not compulsory, to regret the time or labour bestowed on it.

The grades in the Indian are like those in the British medical service, though you have the exceptional advantage of promotion to surgeon-major after the lapse of twelve years, if you have passed a professional examination, which is, in future, to be enforced, though it has not been so up to the present time. This, also, you should do as soon as possible, whilst the habits of study and passing examinations, in which you have been pretty well exercised, are fresh upon you. Depend on it there the pend on it, these things do not become easier from delay, and you will '

feel more comfortable and settled in your real work, with minds relieved of the burden.

After twenty years' service, you will obtain a step in relative rank and an increase of pay. After this, should you remain in the service so long, comes the next step of deputy surgeon-general. A period of five years in this grade adds materially to your pension (£250 a year). Should you be fortunate enough to attain the highest post of all, that of surgeon-general, and hold it for five years, your pension will receive another substantial increment of £350. But, though few may attain to this position, there are many other appointments even more lucrative, though not involving extra pension, some connected with the tive, though not involving extra pension, some connected with the military service, others quite distinct from it. The appointments open to medical officers are fewer than formerly; still they are numerous, and I will tell you briefly what they are, or have been, since my own connection with the service.

In addition to the administrative appointments of surgeon and deputy surgeon-general, the following are now, or recently were, held by medical officers; principal and professors in all the subjects of an university curriculum in medicine, in the Colleges of Calcutta, Madras, Bombay, and also a limited number in the College of Lahore; superintendent of native medical schools at Agra, Nagpore, Patna, Dacca,

etc.; these generally being held in combination with the office of civil surgeon of these important stations.

The important subject of medical education will be entirely in your hands, whether as members of the medical faculty, of the senate, or as mands, whether as members of the medical faculty, of the senate, or as examiners in the Universities of Calcutta, Madras, or Bombay, or as professors in the Medical Colleges. The new College of Calcutta, which was founded in 1833 by Lord W. Bentinck, is, I may tell you, the largest medical school in the world. When I left it in 1872 it numbered over 1,300 medical students on its rolls, and it is increasing every year. There is, perhaps, nothing that has exercised a greater political or social influence for good on the native mind, or done more to consolidate our hold on the affections of the people and the country, since the days when Broughton and Hamilton gained for the British since the days when Broughton and Hamilton gained for the British power the earliest concession of privileges which gave us our first hold in the country from the Moghul of Delhi; and since when, in 1836, the learned Pundit Moodhosoodun Guptoo, laying aside the prejudices of caste, initiated the study of anatomy by dissecting the human body, than the study and extension of medical science in India. It will be for you to sustain and extend the prestige it has acquired, and there is, perhaps, no direction in which your talents and energies may be more usefully directed.

Among offices that may be, or have been, held by medical men in

India, the following may be mentioned:-



Surgeons and assistant surgeons, and resident surgeons of the General and College Hospitals; superintendents of eye infirmaries; garrison surgeons; field surgeons and assistants to armies in the field; surgeon to the viceroy; surgeon to the commander-in-chief; presidency and district surgeons; marine surgeons; police surgeons; superintendent of lunatic asylums; superintendent of emigration; medical superintendent of emigration; medical examiner of accounts; principal medical storekeeper; other medical storekeepers; civil surgeons of stations, very numerous; and sometimes remunerative appointments, to which are joined others; regimental appointments; chemical examiners to Government; analysers of waters; assay and assistant assay masters; superintendent of botanic gardens, Calcutta, Scharunpore, and others; of cinchona plantations; forest appointments; superintendent of fisheries; sanitary commissioner to Government of India; sanitary commissioner of provinces; statistical officer and officers on special duty for investigation of cholera, held by two very distinguished students of this school, Messrs. Cunningham and Lewis; inspector-general and inspector of jails; superintendents of jails; inspector-general and superintendents of vaccination; political agents; assistant political agents; magistrates, coroners; commissioners and deputy commissioners of divisions, offices involving judicial functions; opium agents and assistants; professor of Arabic and secretary to Colleges (formerly); governor of the Andaman Islands (formerly); superintendent of Darjeeling, the late lamented Dr. Campbell; a former Persian envoy; and others that at this moment escape my memory. With many of these offices are combined other duties, or two

memory. With many of these offices are combined other duties, or two or more may be held by the same officer.

In most cases, the civil and military medical appointments give opportunity for private practice. In the Presidency cities and larger civil stations, it is often considerable; and though, perhaps, not so lucrative anywhere as in former days, it is such as would compare not unfavourably with the results of medical practice in European cities. I have heard it said, that the late Dr. N., when surgeon to the General Hospital in Calcutta about thirty years ago, made as much as one lac of rupees, £10,000, a year. Things have changed since then;

medical men are more numerous and honoraria are smaller. Those who realise half the amount are fortunate; but this is not equal to the same in England. The cost of living is great, and the expenditure large; but if health continue, most medical officers may look forward at the completion of their service to retirement with a competency. Unfortunately, health is not always preserved, and the position is forfeited by the necessity of seeking change in Europe. But, lest I should excite undue apprehension in reference to the evils of the climate, I will presently say a few words on the mode of life in India.

I have thus given you a glance at your future work, and an idea of what you may aspire to; I am sure it depends on yourselves how far you may profit by the advantages offered. In these days, though interest and the influence of friends will do something, they are as

nothing to personal merit, which will do more.

To men of apathetic temperament, though correct in all their proceedings and relations of life and duty, the opportunities may seem never to come; but the real fact is, they are neither perceived, nor grasped when they offer, and the favourable moment passes by unheeded, perhaps not to return, and mediocrity is the result; but even to these the service offers something. There is sufficient for all present wants and a pension for the future. After periods of from seventeen to thirty years, you have the option of retiring on a pension according to the length of service, varying from £220 to £550 a year, or if the last five years have been passed in the position of deputy-surgeon or surgeon-general, you will add an additional £250 or £350 to your pension. A liberal allowance of leave is accorded, amounting to six years in the whole period of thirty years; but, unless under very exceptional circumstances, not more than two years can be taken at a time, and that after stated intervals. You will do well to avail yourself of this privilege, even though your health should not seem to require it, for it gives you the opportunity of renewing your home impressions, and refreshing your knowledge of professional subjects; and you will do very well, if it be permitted, to spend portions of your furlough here with that object.



Now, as to your mode of life in India, and indeed other hot and tropical countries, with reference to the preservation of health, I have not much more to say than that common sense and careful living are all not much more to say than that common sense and careful living are all that are required. India means every variety of climate, from the hot damp plains of Bengal to the dry arid plains of the north-west and Punjab, or the cold rarefied atmosphere of the Hill stations; and you must act accordingly. Temperance in all things; regularity of life and habits; avoidance of excessive, prolonged, or undue exposure to the direct rays of the sun and to malarious influences, especially as they occur in certain localities; attention to clothing, which should consist mainly of light woollen materials, to protect you from chills, and equalise the temperature of the body; plenty of, but not too much, work: sufficient exercise; plain food, and extreme moderation in alcowork; sufficient exercise; plain food, and extreme moderation in alcoholic drinks of all kinds; and as little tobacco-smoking as possiblethese precautions, if observed, will keep you in good health, and fit for work for many years; and you will find, I think, as a general rule, that men in India work as hard or as harder than they do here, for, from the time you occupy a position of the least responsibility, work goes on steadily increasing, and developing new motives to exertion.

Of course, in such climates as those of India and the tropics, one is liable to sudden and serious attacks of disease; but, escaping these, as you may reasonably, with care, expect to do, it is wonderful how high a standard of health may be preserved even under the hardest work and the greatest exposure. The tendency is to suffer as much from mental as from physical strain, and as many break down from overwrought brains as from physical exhaustion; but, fortified by such wrought brains as from physical exhaustion; but, fortined by such means as I have suggested, you may to a great extent bid defiance to both. I would repeat the advice that you should, if possible, avail yourselves, at reasonable periods, of the leave which the Government accords you to Europe. It is often said that the doctors and the indigo-planters, men who are most exposed, are the healthiest men in India. This is not, perhaps, altogether true; but it shows that the advantages of exercise, combined with mental occupation, are popularly recognised.

larly recognised.

And now a few words to those of you who are destined for the Navy and Army. Though I cannot profess to indicate all that you may look forward to so well as I can to your Indian colleagues, yet this much I may safely assert, that for you, too, an interesting field of work is open; and, though the variety may be less than in the Indian service, yet it is equally interesting and important. To you will be committed the care of the health of our soldiers and sailors, and of our military and naval stations at home and abroad. Many of you will work side by side with your Indian friends. In the event of war-and who can say how long we shall remain at peace?—the treatment of our sick and wounded will also be your care. To you also it will fall to investigate the laws that also be your care. govern the origin and diffusion of epidemic and other forms of disease; and, as your experience will be gathered in all quarters of the globe, your opportunities of studying the influences of climate will necessarily exceed those of all others, and will enable you to solve problems that are yet unexplained. Nor will your duties be limited to those of a purely military or naval character; for, though I am not sufficiently acquainted with all the details of your services to describe them, I know that there are many special appointments open to those who will aspire to them. In short, to whichever branch of the service you belong, you have before you an useful and holourable career, which will be useful and honourable just in proportion to your own application of the capabilities you possess. In no case, I fear, may you expect to acquire wealth. Were this your object, you should have chosen another profession; but competency, and the means of doing stice to your families, and of supporting the position you attain, you may realise; and if so, and you feel that you have served your country well, and to the best of your ability advanced the knowledge of your profession and the bounds of science, you may be content, for you will have gained that which will bring you the truest happiness and the best reward.

And now I must not detain you longer. I have already trespassed too much on the patience of all, and I will conclude by wishing you all

prosperity and success in your present and future career.





